# The Black Fly, Simulium venustum, Attracted to the Turtle, Chelydra serpentina [1]

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The females of the several blood-sucking families of the Diptera are best known as pests of mammals and/or birds. Nevertheless, many species in several families (Culicidae, Psychodidae, Ceratopogonidae, and Tabanidae) normally obtain the blood meal from various poikilotherms such as reptiles, amphibians, or insects (for a review see Downes, 1958). The Simuliidae, however, have been reliably reported sucking blood from only mammals and birds (Fallis, 1964). There are no records from either Amphibia or Reptilia (Bequaert, 1938; Downes, 1958) and the few records of supposedly insectivorous species (Hagen, 1883; Pryer, 1887; Theobald, in Emery, 1913; Hill, 1923) have not been confirmed by subsequent observation and some, at least, represent misidentifications of various ceratopogonids (Downes, 1958). This note presents the first record of black flies attracted to a reptile.

On May 23, 1964, a large, female of the common snapping turtle (*Chelydra serpentina* (L.)) (Testudines: Chelydridae) was found on a dirt side-road in Algonquin Park, Ontario (46°N., 79°W.). Attention was drawn to the animal by the presence of a large swarm of simuliids flying actively about the animal. The swarm of flies was concentrated about the head of the turtle and many females were seen to land and remain at the margins of the eyes. Flies landed repeatedly on the carapace but did not remain there for more than an instant. Only those flies landing on the head remained for any period of time.

It was not possible to collect specimens from the head of the turtle but ten specimens were captured with the aid of a sweep net. All specimens proved to be females of *Simulium venustum* (Say). None of the captured specimens was engorged and it was not possible to determine whether any flies were successful in obtaining a blood meal. It is not inconceivable, however, that some flies might have been able to penetrate the skin around the eyes and engorge. This may account for the marked tendency of the flies to remain clustered about the membranes of the eyes.

Many simuliids, particularly the ornithophilic species, are unusually host specific (e.g., Fallis and Smith, 1964) whereas the so-called "mammaliophilic" species such as *S. venustum* normally frequent a variety of hosts.

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Females of such common species may occasionally utilize reptilian hosts as sources of blood.

Voucher specimens are deposited in the Canadian National Collection of Insects in Ottawa.

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## LIFE ON A LITTLE-KNOWN PLANET

By Howard E. Evans. E. P. Dutton & Co., Inc., N. Y., 1968, 318 pp. Cloth, $7.95.

This is the type of book which is the bane of a reviewer's existence, a good one. It is far easier to say that . . . has written a fine book, but . . . than it is to unreservedly praise a book without sounding fatuous.

Dr. Evans' work can be read at two levels—the choice is up to the reader. The first is as a purely informational volume on insect life. As such, it is far superior to the average "oh my" book on insects. In language, which, at times, is almost lyrical, the reader is led or rather accompanied through the wonder which is the world of insects. He will perhaps absorb some of Dr. Evans' enthusiasm and reverence for the miracle and the importance of insect life, as well as sadness at how little we really understand regarding them.

There are whimsically titled chapters on soil insects and their relatives, cockroaches, dragonflies, crickets, fireflies (reprinted by "Natural History" in a recent issue), butterflies, flies, bedbugs and relatives, locusts and parasitic wasps. Each is highly informative—even to the professional entomologist. The notes on Classification and references for further reading will be helpful to the interested layman.

It is in the remaining chapters, supplemented by the ones above, that the other level of this volume emerges . . . a lament for the passing natural scene; how little